On some Spiders from Chili and Peru collected by Dr. Plate of Berlin. By F. O. PICKARD-CAMBRIDGE. (Communicated by Prof. G. B. Howes, F.R.S., Sec.L.S.)

[Read 17th November, 1898.]

(Plate 2.)

The present paper contains a list of the Spiders collected by Dr. Plate on a voyage extending from Tumbez in North Peru, down the coast of Chili, to Cape Horn. The collection contained nineteen species, of which seven are new to science. One species has been described in MS. for some years by Mr. R. I. Pocock, of the British Museum of Natural History, and this description has recently been published. There is nothing very striking or noteworthy in this collection, although all spider-forms are interesting from whatever part of the world they come.

There is one curious point to be noted. Two species taken in the island of Juan Fernandez, 500 miles west of Valparaiso, are identical with examples which are indigenous to Northern Europe, namely *Teutana grossa* and *Dysdera crocota*. These spiders are, however, found almost all over the world, so that their presence in Juan Fernandez is not perhaps so astonishing, when we find them also in the Sandwich and Cape Verde Islands, separated by thousands of miles of ocean and continent.

List of Species.

THERAPHOSIDÆ.

Paraphysa manicata, E. Simon. Phryxotrichus roseus (Walck.)?

Citharoscelus Kochii, Pocock.

SCYTODIDÆ.

Sicarius thomisoides, Walck.

DYSDERIDÆ.

Ariadna maxima (Nic.). Dysdera crocota, C. Koch.

CLUBIONIDÆ.

Sparassus bombilius, sp. n. Gayenna maculatipes, Keys.

DICTYNIDÆ.

Amaurobius Platei, sp. n.

Coquimbo, Chili.

Corral.

Coquimbo, Chili.

Coquimbo and Iquique, Chili

Juan Fernandez.

22 . 22

Amciven.

Tumbez, Peru.

ARGIOPIDÆ

Meta nigrohumeralis, sp. n. Juan Fernandez. Tmeticus Defoei, sp. n. 22

Platei, sp. n.

THERIDIIDÆ.

Teutana grossa, C. K. Theridion tepidariorum, C. K.

Cavan.

PHOLCIDÆ.

Pholcus americanus, Nic. Chili.

AGELENIDÆ.

Rubrius annulatus, sp. n. Corral.

LYCOSIDÆ.

Lycosa implacida, Nic. Coquimbo. Juan Fernandez. fernandezi, sp. n. australis, E. Simon. Tekenilla, Cape Horn.

Family THERAPHOSIDÆ.

PARAPHYSA MANICATA, Sim., Hist. Nat. Ar. i. p. 166.

A single adult female was taken at Coquimbo by Dr. Plate in Sept. 1893.

PHRYXOTRICHUS ROSEUS (Walck.)?

An adult male and female of this species were taken by Dr. Plate in Corral, Dec. 1894.

CITHAROSCELUS KOCHII, Poc. Ann. Mag. Nat. Hist. April 1899. (Pl. 2. figs. 13-15.)

A single female of this species was taken by Dr. Plate at Coquimbo.

An adult female Eurypelma, which I hesitate to assign to any species, as well as several immature forms, occurred in Dr. Plate's collection.

Family Scytodidæ.

SICARIUS THOMISOIDES, Walck.

Thomisoides terrosa, Nic., Gay, Hist. de Chile, vol. iii. p. 350, 1849.

Walckenaer forestalled Nicolet in publishing a description of this species and used that author's generic name as the specific. The genus and species belong undoubtedly to Walckenser, who obviously saw Nicolet's work in print, though not published.

The type of the genus can scarcely be terrosa, Nic., for this was an unpublished name. To the single species which Walckenaer recognized, the name thomisoides was given when he gave the name Sicarius to the genus. S. thomisoides, Wlk., is therefore the type of the genus Sicarius. If we regard Sicarius as the proper generic title on the ground that, at the time of its publication, Thomisoides existed only in manuscript, or, if in type, as an unpublished name, as M. Simon has done in Hist. Nat. Ar. 2 ed. p. 271, we must also regard thomisoides as the proper specific title, which M. Simon has however not done in the place mentioned.

Several females and a male of this species were taken by Dr. Plate at Coquimbo and Iquique.

Family Dysderide.

ARIADNA MAXIMA (Nicolet).

Dysdera maxima, Nic., Gay, Hist. de Chile, Zool. iii. p. 341, plate ii. fig. 6.

Two examples were taken by Dr. Plate in the island of Juan Fernandez.

Dysdera crocota, C. K., Die Arachniden, Bd. v. p. 81.

Three adult males of this species were taken in Juan Fernandez by Dr. Plate.

Family Clubionidæ.

Sparassus bombilius, sp. n. (Pl. 2. figs. 1 & 2.)

 σ . Total length 15 mm.; carapace 7×7 ; legs, i. 34—ii. 30—iii. 27—iv. 28.

Colour. Carapace mahogany-brown clothed with golden-grey hairs. Mandibles black, clothed with long golden-grey hairs. Fang-groove fringed with ferruginous-red hairs. Legs very dark mahegany, almost black, hirsute with stiff golden-grey hairs; abdomen clothed with rough golden-grey hairs, a transverse band across the shoulders black, continued indistinctly down the dorsal line, with a second narrower transverse dark band just before the middle, followed towards the spinners by a narrow central band having very short indistinct oblique lateral rays. Lateral area dark brown; sub-ventral area golden-grey, embracing the spinners; central ventral area black. Sternum deep brown, clothed with short golden-grey hairs. Palpi: femora and patellæ orange, tibiæ and tarsi deep brown or black.

Structure. Carapace almost circular, convex. Anterior row of eyes procurved, posterior row straight. Central anteriors LINN. JOURN.—ZOOLOGY, VOL. XXVII. 2

slightly larger than laterals: central posteriors slightly smaller than posteriors; central quadrangle slightly broader than long. Tibial apophysis of palpus S-shaped, falciform, its apex directed outwards and slightly dilate, compressed, spiraliform. Palpal bulb surrounded by a stout circular spine, lying in a groove in the surface of the bulb.

A single adult male of this beautiful species was taken by Dr. Plate at Amciven.

Gayenna maculatipes, Keys., Brasilianische Spinnen, p. 141, pl. iv. 97 & 97 α .

Although the adult male example from Juan Fernandez is considerably larger than the type in Keyserling's collection, yet I am unable to find any difference in the structure.

An adult male and an immature female were taken by Dr. Plate in Juan Fernandez.

Family DICTYNIDE.

AMAUROBIUS PLATEI, sp. n. (Pl. 2. fig. 3.)

3. Total length 12 mm.; carapace 55×35; leg i. 21.

Colour. Carapace pale orange-yellow, suffused with sooty-black on the margins of the caput. Mandibles deep mahogany-brown. Legs pale yellow, deepening to mahogany-brown towards the extremities. Legs i—femora mahogany-brown, with two indistinct dark transverse spots beneath; patella, tibia, protarsus, and tarsus deep mahogany-brown. Legs ii—femora pale yellow, with two transverse spots beneath, the rest as in i. Legs iii. and iv. paler; tibiæ and protarsi indistinctly annulate with sooty-brown. Abdomen black, with pale anterior dorsal area, containing four ill-defined white spots, followed to the spinners by a series (3 or 4) of narrow white \(\Lambda \)-shaped bars. Apex of abdomen deep black. Sternum pale orange-yellow.

Structure. For figure of palpus see Plate 2. fig. 3.

A single adult male was taken by Dr. Plate at Tumbez.

Family Argiopidæ.

Meta nigrohumeralis, sp. n. (Pl. 2. figs. 4 & 5.)

♀. Total length 15 mm.

Colour. Carapace pale orange-yellow; the caput, central stria, and a submarginal line rich brown. Mandibles rich mottled brown. Legs pale orange-yellow; femora suffused with brown towards the apex; patellæ, tibiæ, and pretarsi of i. and ii.

suffused and indistinctly annulated with brown; those of iii. and iv. more definitely annulate. Abdomen pale clay-white with deep black shoulder-spots—or a large black spot, bilobate and margined with pure white behind; a central brown band runs to the spinners, giving off lateral sooty-brown oblique lines, blending with the mottled brown and black lateral areas; ventral surface pale yellow-brown, margined on each side with a straight, narrow, broken white band. Sternum rich brown.

Structure. A figure of the vulva appears on the Plate (fig. 5). Six adult females were found on the island of Juan Fernandez by Dr. Plate, but no males. This species bears a general resemblance to the European Meta Menardi, which is also found in North America, but is none the less quite distinct from it.

TMETICUS DEFOEI, sp. n. (Pl. 2. figs. 6 & 7.)

♀. Total length 7.5 mm.

Colour. Carapace, sternum, and legs rich orange-mahoganybrown. Abdomen black, with a pale yellow curved band on each side of the anterior dorsal area, enclosing a large black triangular patch; behind these longitudinal bands come two short transverse pale bands on each side. The lateral area has two longitudinal indistinct pale bands, and the ventral surface bears in the centre a dull pale blotch.

Structure. The mandible exhibits on the outer side the usual transverse striæ; and a figure of the vulva will be found on the Plate (fig. 7). The inferior margin of the fang-groove bears a row of five short cusps; the superior a row of seven longer teeth. The tibiæ of the legs bear a pair of short erect dorsal bristles.

Two adult females were taken by Dr. Plate on the island of Juan Fernandez.

TMETICUS PLATEI, sp. n. (Pl. 2. figs. 8 & 9.)

2. Total length 8.5 mm.

Colour. Carapace, mandible, legs, and sternum dull orangebrown, more or less suffused with darker brown. The base and apex of the femora are suffused with darker brown. The tibiæ and protarsi have each an indistinct broad dark annulation towards the base, and another narrower one towards the apex. Abdomen clive-brown; dorsal area mottled with dull yellowwhite blotches, the best defined being a series of five transverse A-shaped bars, their apices not confluent, extending from the middle to the spinners.

Structure. Mandibles very stout, with two rows of teeth, the inferior with 9 small conical cusps, the superior with 11 long stout teeth increasing in length, the longest being the fifth to the tenth. Outside the superior row of teeth lies an irregular row of stiff bristles. Eyes. Posterior row straight; eyes subequal, centrals slightly closer together, three fourths of a diameter apart; anterior row slightly recurved; centrals small, one fourth smaller than the laterals, half a diameter apart, over one diameter from the laterals: lateral eyes equal and in contact. Tibiæ of legs with two crect bristles above, one near the base, the other towards the apex. The mandibles bear a series of striæ on the outer side, and the coxæ of the palpi a few stiff bristles on the inner side.

A single adult female was taken on the island of Juan Fernandez by Dr. Plate.

Family THERIDIIDÆ.

TEUTANA GROSSA, C. K.

Theridion grossum, C. K., Die Arachniden, iv. p. 112.

Two adult females were taken on the island of Juan Fernandez by Dr. Plate.

THERIDION TEPIDARIORUM, C. K., Die Arachniden, viii. p. 75. A single adult female was taken at Cavan by Dr. Plate.

Family Pholcidæ.

Pholous americanus, Nic.

Two examples, which probably belong to this species, occurred in Dr. Plate's collection from Chili.

Family Agelenidæ.

RUBRIUS ANNULATUS, sp. n. (Pl. 2. fig. 10.)

♀. Total length 15 mm.

Colour. Carapace, sternum, and legs pale orange-yellow, mandibles black, maxillæ and labium deep brown. The sides and anterior margin of the caput are deep brown, besides a narrow central and two narrow lateral brown bands converging at the central stria. An irregular brown band runs midway between the central stria and the margin, consisting in reality of a series of blotches on the lateral striæ which are confluent. The margin of the sternum is suffused with dark brown. The femora of

the legs bear three indistinct dusky annulations; the patellæ are dusky along their sides, while the tibiæ have two deep brown annulations on the upperside, obsolete below. The protarsi also exhibit two dark annulations. The abdomen, which has somewhat lost its colour, is dull white mottled with dark grey.

Structure. Carapace long, narrow; caput raised, convex, with three rows of stiff hairs along the three brown bands. Posterior row of eyes slightly procurved, eyes equal, centrals rather closer. one and an eighth diameter apart. Anterior row straight, centrals slightly smaller than the laterals, three fourths a diameter apart, the same distance from the laterals. Clypeus equal to a diameter of the anterior centrals. Mandibles stout, triangular, conical, gibbous above (as in Colotes). The margins of the fanggroove bear, each, 5 teeth, and the upper margin bears also a fringe of long incurving hairs. Legs spinose, femora with five or six spines above, tibiæ with three pairs beneath and one on each side, toward the apex, and often one towards the base. Protarsi with three or four pairs of stout, long spines beneath. Anterior tarsi with a double series of stiff bristles beneath; posterior with some spines towards the apex, amongst the bristles. claws three.

I refer this spider to the genus Rubrius, E. Simon, although the character assigned to it, with several other genera, "chelarum margo inferior dentibus, 3 or 4 armatus," does not strictly apply. The species is undoubtedly closely allied to R. subfasciatus, Sim., Mission Sci. du Cap Horn, p. 14 (1887), but still distinct from it. The central anterior eyes are not very much smaller than the laterals, certainly not "plus duplo" as M. Simon says of subfasciatus.

A single adult female was taken by Dr. Plate at Corral.

Family Lycosidæ.

Lycosa implacida, Nic.

Gay, Hist. de Chile, Zool. iii. p. 358, pl. ii. fig. 10.

A single specimen (Qadult) from Coquimbo, Chili.

Lycosa fernandezi, sp. n. (Pl. 2. figs. 11 & 12.)

- $_{\rm \it c}$. Total length 16 mm.; carapace 8×6 ; legs, i. 26—ii. 23·5—iii. 22·5—iv. 29·5
- \circ . Total length 25 mm.; carapace 10×7 ; legs, i. 27—ii. 25—iii. 24—iv. 33.

15.

- d. Colour. Carapace mahogany-brown, clothed with fine golden-brown pubescence. Legs clothed with golden-brown pubescence. Anterior tibiæ and tarsi sooty black. Abdomen: shoulders black; anterior half with a central dorsal brown bar, its three angles picked out with black, followed towards the spinners by two or more small triangular black marks; on each side is a row of three or more black spots, contrasting with some white ones lying adjacent. Ventral surface unicolorous pale golden grev.
- Q. Colour similar to that of the male, except that the golden pubescence has a deeper yellow-olive tinge. Abdomen entirely clothed on the upper side with golden brown pubescence, with a central dorsal suffusion of rust-red. Shoulders slightly tinged with brown, anterior dorsal mark very obscure, followed towards the spinners by two or three very obscure pale A-shaped marks.
 - J. Structure. Palpus & organs. See Plate 2. fig. 11.
 - Vulva. See Plate 2, fig. 12.

Four females and one male of this species, belonging to the Trochosa group, were taken by Dr. Plate in the island of Juan Fernandez.

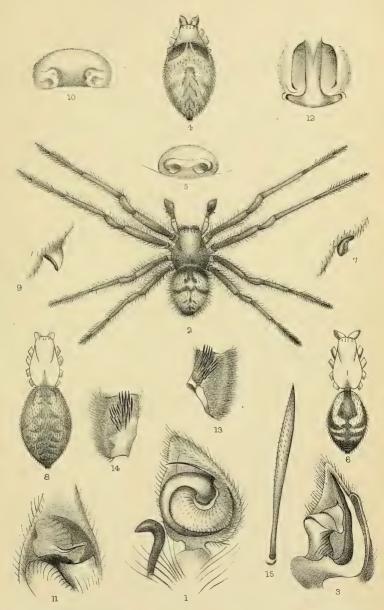
LYCOSA AUSTRALIS, E. Simon, Bull. Soc. Zool. Fr. 1884, p. 3.

A single adult male, most probably belonging to this species, was taken at Tellenika on the False Cape Horn. M. Simon's type was taken on the Ile Hoste.

EXPLANATION OF PLATE 2.
Fig. 1. Sparassus bombilius, sp. n. Adult male. Right palpus from beneath.
2. " " " " Full figure.
3. Amaurobius Platei, sp. n. Right palpus.
4. Meta nigrohumeralis, sp. n. Adult female. Full figure.
5. " Vulva.
6. Tmeticus Defoei, sp. n. Adult female. Full figure.
7. " " " Vulva.
8. ,, Platei, sp. n. Adult female. Full figure.
9. " " " Vulva.
10. Rubrius annulatus. Adult female. Vulva.
11. Lycosa fernandezi. Adult male. Palpal bulb.
12. ,, ,, Adult female. Vulva.
13. Citharoscelus Kochii. Female. Coxa of leg i., inside, showing stridu-
lating spines.
14. ", , , Coxa of pedipalp, outside, showing

stridulating spines.

A single stridulating spine, enlarged.



F.O.Pickard-Cambridge del. et.lith.

West, Newman imp